

Production of Goods From Fluoroplast-4.  
Investigation of the Preforming Process

64-8-2/19

(reference 9) about the computation of the press process of dry refractory materials as well as the papers about the preforming process in press powders were taken into consideration (reference 10). The purpose of present paper was the detection of the optimum specific pressure in the preforming from the pulverulent fluoroplast-4, as well as the detection of the optimum thermal retardation of the tablets at this pressure. As criteria for the optimum pressures and preforming times the variations of the linear dimensions and of the specific weight of the pressed samples were chosen. It is shown that the preforming from the pulverulent fluoroplast-4 at specific pressures of not below 300 kg/cm<sup>2</sup> and not above 750 kg/cm<sup>2</sup> is to be carried out. It is shown that a thermal retardation under pressure is necessary in the preforming. For the investigated dimensions of the unworked pieces a formula

$$T = A \frac{H}{D}$$

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was found. This determined the dependence of the amount

Production of Goods From Fluoroplast-4.  
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of the thermal retardation of the height and diameter of the unworked pieces. T - optimum thermal retardation of the unworked pieces of fluoroplast-4 under the preforming pressure, in minutes. A - constant (in the polymers investigated here it amounted to 7,7 - 9,1) H- the height of the unworked piece. D - diameter of the unworked piece. There are 4 figures, 2 tables, and 11 references, 2 of which are Slavic.

AVAILABLE: Library of Congress

Card 3/3

KOTRELEV, V. N.

GORINA, A.A.; KARGIN, V.A.; KOZLOV, P.M.; KOTRELEV, V.N.

Processing polytetrafluoroethylene into industrial articles, Khim.  
prom. no.8:453-457 D '57. (MIRA 11:2)  
(Ethylene) (Plastics--Molding)

KOTRELEV, V., kand. tekhn. nauk; ZARUBITSKIY, A., inzh.

Determining the free formaldehyde content of melamine-and-urea-  
formaldehyde resins and press-powders. Stroil. mat. 4 no. 7:32-33  
J1 '58. (MIRA 11:7)

(Formaldehyde)  
(Gums and resins)

AUTHORS: Kotrelev, V. N., Rubtsova, I. K. 79-28-3-45/61  
TITLE: On the Reaction of Allyloxyethanol With Monovinylethers (O  
vzaimodeystvii alliloksietanola s prostymi vinilovymi efirami)  
PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 3, pp. 770-771  
(USSR)  
ABSTRACT: By many single syntheses and investigations Shostakovskiy and  
his collaborators showed that acetals can be obtained by the  
reaction of monovinylethers with compounds containing the  
hydroxylgroup (reference 1). The synthesis of the acetals which  
contain in their composition an unsaturated radical are de-  
scribed in detail (reference 2). The present investigation was  
conducted with the aim of synthesizing the acetals by means of  
allyloxyethanol and of investigating their capability for a  
common polymerization. The synthesis of the mentioned acetals  
was carried out from monovinylethers and allyloxyethanol  
according to the method of Shostakovskiy (see reaction pro-  
cess). It is known that the acetals of allyl alcohol are  
neither capable of polymerizing with respect to the radical  
nor to the ion mechanism, but that they are easily capable of

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On the Reaction of Allyloxyethanol With Monovinylethers

79-28 3-45/61

forming commonly forming net-like polymers. The authors investigated the capability of the allyloxyethanol acetals for common polymerization with methylmethacrylate at a ratio 10 : 90 in the presence of benzoylperoxide. In all cases solid, colorless and transparent polymers were obtained; some of them were of increased heat resistance (compared with polymethylmethacrylate). The following acetals unknown until now were synthesized and described: ethylallyloxyethylacetal, isopropylethylallyloxyethylacetyl, n-butylallyloxyethylacetyl and diallyloxyethylacetyl of acetaldehyde. There are 1 table and 4 references which are Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy institut plasticheskikh mass  
(Scientific Research Institute for Plastic Materials)

SUBMITTED: February 14, 1957

Card 2/2

PESIN, L.M.; KOTRELEV, V.N.; ZARUBITSKIY, A.Ye.; SEGALEVICH, F.Ye.

The influence of some melamine impurities on its condensation  
with formaldehyde. Zhur. prikl. khim. 31 no.1:146-148 Ja '58.  
(MIRA 11:4)

(Melamine) (Condensation (Chemistry))  
(Formaldehyde)

SHOSTAKOVSKIY, M.F.; KOTRELEV, V.N.; KOCHKIN, D.A.; KUZNETSOVA, G.I.;  
KALININA, S.P.; BORISENKO, V.V.

Synthesis and various conversions of tin and silicon organic compounds.  
Zhur. prikl. khim. 31 no.9:1434-1436 S '58. (MIRA 11:10)

1. Institut organicheskoy khimii AN SSSR i Gosudarstvennyy nauchno-  
issledovatel'skiy i proyektnyy institut promyshlennosti plasticheskikh  
mass.

(Tin organic compounds) (Silicon organic compounds)



KOCHKIN, D.A.; KOTRELEV, V.N.; SHOSTAKOVSKIY, M.F.; KALININA, S.P.;  
KUZNETSOVA, G.P.; BORISENKO, V.V.

Tin organic polymers. Vysokom. soed. 1 no.3:482-484 Mr '59.  
(MIRA 12:10)

1.Nauchno-issledovatel'skiy institut promyshlennosti plasticheskikh  
mass.

(Polymers) (Tin organic compounds)

KOCHKIN, D.A.; KOTRELEV, V.N.; KALININA, S.P.; KUZNETSOVA, G.I.; LAYNE,  
L.V.; CHERVOVA, L.V.; BORISOVA, A.I.; BORISENKO, V.V.

Organotin monomers and polymers. Vysokom.sped. 1 no.10:  
1507-1513 0 '59. (MIRA 13:3)

1. Nauchno-issledovatel'skiy institut plasticheskikh mass.  
(Tin organic compounds) (Polymers)

KOTRELEV, V.N.

SVI/1982

International symposium on macromolecular chemistry, Moscow, 1960.

Neobimoderny slovoizmen po makromolekulyarny khimii SSSR, Moskva, 14-18 Iyuna 1960 g.; doklady i referaty. Sbornik I. (International Symposium on Macromolecular Chemistry Held in Moscow, June 14-18, 1960) Papers and Abstracts. Section I. (Moscow, Izdatvo AN SSSR, 1960) 146 p. 5,500 copies printed.

Sponsoring Agency: The International Union of Pure and Applied Chemistry, Commission on Macromolecular Chemistry

Tech. Ed.: T. F. Polyakov.

PURPOSE: This collection of articles is intended for chemists and researchers interested in macromolecular chemistry.

COVERAGE: This is Section I of a multi-volume work containing scientific papers on macromolecular chemistry in Moscow. The material includes data on the synthesis and properties of polymers, and on the processes of polymerization, copolymerization, polycondensation, and polyaddition. Each part is presented in full or summarized in French, English, and Russian. There are 47 papers, 32 of which were presented by Soviet, Russian, and American chemists. No personalities are mentioned. References accompany individual articles.

Thompson, J. L., B. A. Dolgoplosk, T. G. Zhuravskaya, A. N. Koryakova, and T. E. Kuznetsova (USSR). The Synthesis of cis- and trans-Diene Polymers on Oxide Catalysts and a Study of Their Structure and Properties 13

Stoll, A., G. V. Kozlov, Yu. N. Filipovskiy (USSR). Synthesis and Polymerization of Zwitterionic Polymers 47

Polmaney, M. I., M. A. Sternikova, and V. Zinov' (Czechoslovakia). The Structure of Hardened Unsaturated Polymers 58

Alibegovic, T. A., J. V. Kulyova, and N. N. Zolotarev (USSR). New Method of Preparation of Polymers and Their Oligomers 64

Bobashevsky, R., and A. Sternikova (Czechoslovakia). Analysis of Cross-Linked Polymers 72

Kochanov, V. A., V. P. Melnikova, M. G. Fedorova, L. V. Kuznetsova, and G. A. Gerasimova (USSR). On the Synthesis and Properties of Crystalline Polymers of the Type of Polypropylene and Polypropyleneoxide 90

Makarov, S. G. (USSR). Cyclic Polymerization and Copolymerization of Vinylacetate 101

Chubina, Ya. A., J. L. Ponomarev, A. T. Topolovskiy, and B. A. Kozlovskiy (USSR). Synthesis of Crystalline Polymers 118

Atsukova, L. A., and Ye. N. Bostrikova (USSR). Polymerization of Polyfunctional Compounds 124

Polman, O. P., M. D. Dineko, E. A. Kozlovskiy, and M. Kozlovskiy (USSR). Polymerization of Vinylacetate in the Presence of Butyllithium and Titanium Chloride Type Catalysts 131

Korshak, V. V., S. L. Sosin, and V. P. Alkhasova (USSR). On the Preparation of the New Type of Linear Polymers by the Reaction of Polymerization 141

Krasitskiy, N. G., A. V. Topolovskiy, and S. G. Durgunyan (USSR). The Synthesis of Copolymerization Polymers on a Complex Catalyst (C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>Al-Cl 152

Kolomoyskiy, O. S., S. L. Davydov, and N. V. Kuznetsova (USSR). Germanium-Containing Polymers 156

Shchegolevskiy, M. P., S. P. Kozlov, V. N. Kozlov, D. A. Kozlov, G. A. Kozlovskiy, L. V. Lopya, A. I. Kozlovskiy, and V. V. Kozlovskiy (USSR). Organosilicon Polymers 160

Kozlov, M. M., I. K. Kozlovskiy, and P. S. Kozlovskiy (USSR). The Effect of Chemical Structure on the Polymerization Activity of the Unsaturated Organosilicon Compounds 167

Volkovskiy, M. V. (USSR). Cooperative Processes in the Polycondensation of Bicomonomers 202

Card 6/9

88546

S/191/60/000/011/002/016  
B013/B054

15.8101

AUTHORS: Zernova, K. I., Kirpichnikova, V. V., Kotrelev, N. N.,  
Kuz'mina, S. Ya.

TITLE: Aging of Polyethylene and Its Mixtures With Polyisobutylene  
Under Atmospheric Conditions

PERIODICAL: Plasticheskiye massy, 1960, No. 11, pp. 4 - 8

TEXT: The present paper deals with the aging of polyethylene and its mixtures with polyisobutylene. Samples of ethylene and its mixtures with polyisobutylene at a ratio of 90:10 ((ПОВ-90) - POV-90), 67:33 (POV-67), and 50:50 (POV-50) were subjected to fatigue tests in the open air under different climatic conditions in the central part of the USSR, on the coast of the Barents Sea and of the Black Sea, and in Central Asia. The test conditions are sufficiently characterized by the meteorological data of the regions concerned (Table 1). Mechanical characteristics, fatigue strength and elongation, were determined, and thermomechanical properties as well as structural changes were studied. In all materials of the group mentioned,

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Aging of Polyethylene and Its Mixtures With  
Polyisobutylene Under Atmospheric Conditions

S/191/60/000/011/002/016  
B013/B054

a noticeable deterioration of mechanical properties was observed during the tests: a decrease in strength and a considerable drop in relative elongation. A higher polyisobutylene content reduced the resistance of the polymeric mixture of atmospheric factors. It was found that higher temperatures accelerated the aging of the material, and that a continuous and intense exposure to sunlight greatly increased the degree of aging. Zhurkov's apparatus, modified by Kanavets (Ref. 2), was used to study the thermomechanical properties. The thermomechanical curves showed: 1) The range of elasticity was missing in all curves; 2) after two years of aging, the temperature of transition to the viscous state shifted slightly towards lower temperatures; 3) after aging the curves for all materials showed a character different from that before aging. This indicates the formation of reactive groups due to chemical changes during aging. The strong decrease in elongation, starting in all polyethylene - polyisobutylene mixtures after 6 - 8 months already, indicates the predominance of the destruction process during aging. The structural changes during aging were studied by infrared spectroscopy, and the formation of aldehyde groups was ascertained. Like other hydrocarbons, polyethylene oxidizes

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Aging of Polyethylene and Its Mixtures With  
Polyisobutylene Under Atmospheric Conditions

S/191/60/000/011/002/016  
B013/B054

during aging with formation of peroxides which decompose and give secondary decomposition products, aldehydes, carbon dioxide, etc. (Ref. 1). The tests showed that polyethylene and its mixtures with polyisobutylene cannot be used longer than 3-4 months in the mentioned characteristic areas under atmospheric conditions (in the open air) because of their low resistance to solar radiation. There are 10 figures, 1 table and 4 Soviet references.

X

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20487

S/191/61/000/003/005/015  
B124/B203

15.8114

AUTHORS: Kotrelev, V. N., Kalinina, S. P., Kuznetsova, G. I.

TITLE: Polymers on the basis of ferrocene and its derivatives

PERIODICAL: *Plasticheskiye massy*, no. 3, 1961, 24-26

TEXT: The authors obtained resins and the corresponding molding powders from some products containing a ferrocenyl residue. It was attempted to obtain polymers through interaction of ferrocene with diazotized benzidine and polymerization of unsaturated ferrocenyl ketones. The reaction of ferrocene with diazotized benzidine was conducted in the manner described in publications for the arylation of ferrocene with diazo compounds (Ref. 5: A. N. Nesmeyanov, E. G. Perevalova, R. V. Golovnya, O. A. Nesmeyanova, DAN SSSR, 97, 459 (1954); E.O.Fischer, D. Sens, Z.Naturforsch., 9a, 386 (1954); Ref. 6: G. D. Broadhead, P. L. Pauson, J.Chem.Soc., 1955, 367). In the reaction with diazotized benzidine, however, a mixture of products was formed which could not be separated. Ferrocene and benzidine were reacted in different molar ratios (1:3; 1:1, 2:1), and gave mixtures with different solubilities and

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20487

S/191/61/000/003/005/015  
B124/B203

Polymers on the basis of...

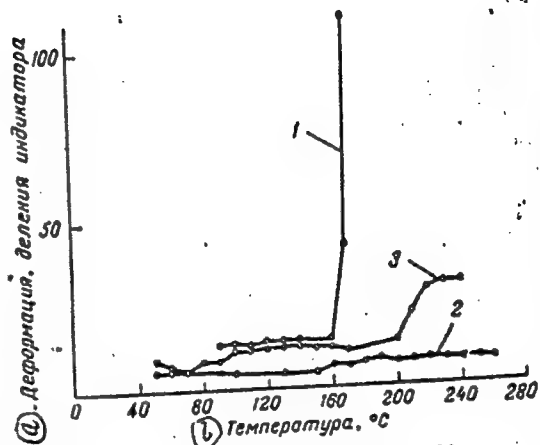
melting points; but it was not possible to isolate pure substances. An attempt has also been made to obtain high-molecular compounds on the basis of unsaturated ferrocenyl ketones. For this purpose, the reaction of 1,1-diacetyl ferrocene with furfural was performed. The mixture was heated in methylene chloride and alcohol in the presence of lye at molar ratios of 1:2 and 1:1 between 1,1-diacetyl ferrocene and furfural. With 1:1, it was possible to produce a polymer. The thermomechanical properties of the resulting polymers as determined with a consistometer are shown in the figure. There are 1 figure, 1 table, and 6 references: 3 Soviet-bloc and 3 non-Soviet-bloc. The reference to the English-language publication reads as follows: L. E. Coleman, M. D. Rausch, J. Polymer Sci., 28, no.116 (1958).

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Polymers on the basis of...

Figure: Thermomechanical curves of polymers

Legend: (1) Product of the interaction of ferrocene with diazotized benzidine + kaolin (2:1); P = 1 kg;  
(2) polymer + kaolin (60%; P = 3 kg);  
(3) polymer of difurfural acetylferrocene (P = 3 kg). (a) Deformation, graduation of the indicator, (b) temperature, °C.



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26290

S/190/61/003/008/003/019

B110/B220

15.8150

AUTHORS: Shostakovskiy, M. F., Kotrelev, V. N., Kalinina, S. P.,  
Kuznetsova, G. I., Layne, L. V., Borisova, A. I.

TITLE: Organotin monomers and polymers. IV. Synthesis and conversion  
of tin-containing esters of acrylic and cinnamic acids

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 8, 1961,  
1128-1130

TEXT: The present paper deals with the synthesis of organotin derivatives of cinnamic and acrylic acids. The synthesis was performed by a method developed by the authors. The vaporous alkyl halide was reacted in a tube furnace or autoclave with an Sn-Mg alloy in the presence of various solvents and catalysts. The alkyl-halide tin compounds formed were saponified with lye to the corresponding hydroxy derivatives, and then the esters were obtained by reaction with acrylic or cinnamic acid. 1) Triethyl-stannyl acrylate  $(C_2H_5)_3SnOCOCH=CH_2$ , was obtained from a 50% aqueous solution of acrylic acid at  $5-10^{\circ}C$  by adding triethyl stannol. The white crystalline

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Organotin monomers and polymers ...

<sup>26290</sup>  
S/190/61/003/008/003/019  
B110/B220

precipitate (melting point 102°C) could be dissolved in organic solvents. 2) In the same way, tributyl-stannyl acrylate was obtained from hexabutyl stannous oxide and acrylic acid. 3) The triethyl-stannyl ester of cinnamic acid was obtained from cinnamic acid and hexaethyl stannous oxide according to the equation  $(C_2H_5)_6Sn_2O + 2 C_6H_5=CHCOOH \rightarrow 2 (C_2H_5)_3SnOCOCH=CHC_6H_5 + H_2O$ . The organotin compounds obtained polymerize easily, and form transparent solid copolymers with styrene and methyl methacrylate. The thermomechanical properties of some polymers and copolymers are shown in Fig. 2. There are 2 figures and 3 Soviet references. X

ASSOCIATION: Nauchno-issledovatel'skiy institut plasticheskikh mass  
(Scientific Research Institute of Plastics)

SUBMITTED: September 1, 1960

Card 2/3

15.8150

26291  
S/190/61/003/008/004/019  
B110/B220

AUTHORS: Shostakovskiy, M. F., Kotrelev, V. N., Kuznetsova, G. I.,  
Kalinina, S. P., Layne, L. V., Borisova, A. I.

TITLE: Studies on the synthesis and conversions of organotin  
monomers and polymers. V. Study of the formation of  
organotin polymers as a function of the polymerization con-  
ditions, and some physicochemical properties of organotin  
polymers

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 8, 1961,  
1131-1134

TEXT: The present study deals with the yield in polymers of triethyl-  
stannyl methacrylate and acrylate as a function of polymerization time,  
temperature, initiation, and concentration. Benzoyl peroxide, azoisobutyric  
acid dinitrile, or triethyl-benzyl ammonium chloride served as initiators.  
The results are shown in Fig. 1. The composition of the copolymer from  
triethyl-stannyl methacrylate and methyl methacrylate was studied for  
initial molar ratios of the components of 1:1, 1:4, and 1:12. At an initial

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S/190/61/003/008/004/019  
B110/B220

Studies on the synthesis and ...

ratio of 1:1, the components of the copolymer were approximately equal. The composition was, however, 5:1 when the initial ratio had been 1:4. It is concluded that organotin compounds polymerize more slowly than methyl methacrylate. Experimental results: 1) The region of strong deformation of organotin methacrylates is found at higher temperatures than that of the corresponding acrylates. 2) The temperature of initial deformation decreases considerably with increasing size of the alkyl radicals. The dielectric properties of copolymers are listed in Table 1. The copolymer of triethyl-stannyl methacrylate with methyl methacrylate was easily hydrolyzed by alkalis. It is, however, stable in water, dilute HCl, and dilute  $H_2SO_4$ . Papers of M. M. Koton et al. (Ref. 4: Mezhdunarodnyy simposium po makromolekulyarnoy khimii, Moskva, June, 1960, I sektsiya, p. 167. (International Symposium on High Molecular Chemistry, Moscow). are mentioned. There are 2 figures, 2 tables, and 4 Soviet references.

ASSOCIATION: Nauchno-issledovatel'skiy institut plasticheskikh mass (Scientific Research Institute of Plastics). Institut organicheskoy khimii AN SSSR (Institute of Organic Chemistry AS USSR)

Card 2/5

KOTRELEV, V.N.; TARUBITSKIY, A. Ye.

Method for the quantitative determination of melamine by sublimation.  
Zav.lab. 27 no.10:1207-1208 '61. (MIRA 14:10)

1. Institut plasticheskikh mass i Nauchno-issledovatel'skiy institut  
novykh stroitel'nykh materialov Akademii stroitel'stva i arkhitektury  
SSSR.

(Melamine)

SECHERBATENKO, V.V.; MIKULINSKAYA, L.R.; BEGANSKAYA, L.S.; ZUBKOV, I.A.;  
GRINEVICH, K.P.; KOTRELEV, V.N.; VOLODIN, P.A.

Use of organosilicon compounds and fluoroplast in the baking  
industry. Trudy TSNIKHP no.8:85-88 '60. (MIRA 15:8)  
(Bakers and bakeries--Equipment and supplies)  
(Protective coatings)

TIKHOMIROVA, N.S.; ZERNOVA, K.I.; KOTRELEV, V.N.

Some methods of evaluating plastic lining materials in their  
relation to corrosive liquids. Plast. massy no.12:40-45 '62.

(MIRA 16:1)

(Plastics) (Corrosion-resistant materials)

ACCESSION NR: AP3001579

S/0191/63/000/006/0026/0029

AUTHOR: Akutin, M. S.; Kotrelev, V. N.; Kovarskaya, B. M.; Kostryukova, T. D.;  
Tarasov, V. V.; Sidnev, A. I.; Rodin, E.; Nitshe, O. N.; Nayman, M. B.

TITLE: Casting of polycarbonates under pressure.

SOURCE: Plasticheskiye massy, no. 6, 1963, 26-29

TOPIC TAGS: Diflon, polycarbonate, thermal oxidation

ABSTRACT: The change in molecular weight and mechanical properties of a polycarbonate "Diflon" under laboratory oxidation and on pressure-casting was studied. Polycarbonates are destroyed more rapidly by pressure casting than by thermal oxidation. Apparently, this acceleration is combined with the presence of mechanical destruction. The minimum amount of time and temperature for transforming the polymer to the viscous-flowing state should be used in order to reduce the extent of destruction. Orig. art. has: 9 figures, 1 table and 1 equation.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 01Jul63

ENCL: 00

Card 1/2



TIKHOMIROVA, N.S.; KOTRELEV, V.N.

Some methods for calculating the service life of a plastic lining  
performing in aggressive liquids. Plast.massy no.10:36-38 '63.  
(MIRA 16:10)

L 41604-65 EWT(m)/EWP(j) Pg. 4 BM  
ACCESSION NR: AR5005643

S/0081/64/000/022/8039/8039

SOURCE: Ref. zh. Khimiya, Abs: 228234

AUTHOR: Kotrel'ev, V.N.; Kostryukova, T.D.; Besfamil'nyy, I.B.; Tarasov, V.V.

TITLE: The properties, processing and use of polycarbonates

CITED SOURCE: Sb. Primeneniye plast. mass v mashinostr. i priborostr. Minak, 1964, 163-172

TOPIC TAGS: polycarbonate synthesis, polycarbonate mechanical property, polycarbonate working, radio part manufacture, phosgene, transesterification, diphenyl carbonate/ Diflon polycarbonate

TRANSLATION: The "Diflon" brand of polycarbonate can be obtained by the direct reaction of dihydroxy compounds with phosgene or by the transesterification of diphenyl carbonate with diphenylolpropane. Diflon has a molecular weight of up to 200,000, a specific gravity of 1.2, a density in dry granular form of 650 g/liter, and a processing temperature interval of 220-320°C. The specific impact toughness of Diflon is 460-500 kg-cm/cm<sup>2</sup>; the tensile, compressive and bending strength are 600-700, 800-900 and

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ACCESSION NR: AR5005643

1000-1100 kg/cm<sup>2</sup>, respectively; and the Martens heat resistance is 135-140C. Diflon does not show cold fluidity and can be used in the temperature range from -100 to +130C; it is a self-quenching, chemically stable material. Diflon can be worked on casting machines (casting pressures of 1500-2200 kg/cm<sup>2</sup>) or extruders, and can also be subjected to mechanical processing. Diflon is recommended for use in the manufacture of construction parts and the parts of electrical and radio equipment. Z. Ivanova

ENCL: '00

SUB CODE: MT. 00

ML  
Card 2/2

L 40982.65 BWT(M)/KPP(G)/DNR(1)/F-PS-4/PC-11 8/0191/65/000/003/0043/0046  
 ACCESSION NR: AF5006363

AUTHOR: Yermolina, A. V.; Andre, G. P.; Pechenkin, A. A.; Igonin, L. A.; Kotre-  
 lev, V. N.; Akutin, N. V.

TITLE: Microscopic and roentgenographic investigation of the structure of block  
 polycarbonates

SOURCE: Plasticheskiye massy, no. 1, 1965, 43-46

TOPIC TAGS: polycarbonate structure, block polycarbonate, microscopic structure,  
 x-ray diffraction, dihydroxyphenylpropane polymer, dihydroxydiphenylcyclohexane  
 polymer

ABSTRACT: The authors studied the supermolecular structure of amorphous and  
 crystalline PK-1 ((4,4-dihydroxyphenyl-2,2-propane)-based polycarbonate) and  
 PK-2 ((4,4-dihydroxydiphenyl-1,1-cyclohexane)-based polycarbonate) prepared  
 recently in the USSR, the structure and properties of which have not yet been des-  
 cribed in the literature. The phase state and the degree of molecular orderli-  
 ness of the pressure-cast slab and blade-shaped samples were assessed by the  
 shape and intensity of X-ray scattering curves obtained in a URS-50-I diffracto-

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L 40989-65

ACCESSION NR: AP5006563

meter, and the secondary structure was examined by microphotographing brittle cleavage sections of samples kept for 2 hrs. in liquid nitrogen. The state of molecular orderliness of the polycarbonates was found to be closely related to the chain's chemical composition; the more complex and bulky chains of PK-2 developing poorly ordered amorphous structural patterns, inferior to the more perfect spherulitic structural patterns of PK-1. The former, however, exhibited greater impact (140-160 kg/cm<sup>2</sup>) and tensile (800 kg/cm<sup>2</sup>) strength than the latter. "The polymer sample was provided by the Kafedra tekhnologii vysokomolekulyarnykh soedineniy MKhT (Department of the Technology of Macromolecular Compounds, MKhT)." Orig. art. has. 7 figures.

ABSTRACT: None

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NO REF SOV: 003

OTHER: 002

Card

40  
212

L 5298-66 EWT(m)/EPF(c)/EWP(j)/T RPL WW/JW/RM

ACC NR: AP5025037

SOURCE CODE: UR/0286/65/000/016/0084/0084

AUTHORS: Kotrelev, V. N.; Opolovenkov, A. F.; Kalinina, S. P.; Kuznetsova, G.  
I.; Savina, M. Ye.; Gus'kova, O. I.; Nagornaya, Yu. F.; Akutin, M. S.

ORG: none

TITLE: A method for obtaining grafted polymers. Class 39, No. 173949 [announced  
by State Scientific Research Institute of Plastics (Gosudarstvennyy nauchno-  
issledovatel'skiy institut plastmass)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 84

TOPIC TAGS: polymer, grafted polymer, plastic, monomer, vinyl, fluorine

ABSTRACT: This Author Certificate presents a method for obtaining grafted polymers  
by grafting vinyl polymers to fluorine-containing polymers in the presence of an  
initiator. Cerium ammonium nitrate is used as the initiator.

SUB CODE: MT, GC SUBM DATE: 11Feb63/ ORIG REF: 000/ OTH REF: 000

Card 1/1

UDC: 678.743.41 66.097.3:546.39

09010693

L 08795-67 EWT(m)/EWP(j) IJP(c) RM

ACC NR: AP6030847

(A, N)

SOURCE CODE: UR/0191/66/000/009/0020/0022

AUTHOR: Kolesnikov, G. S.; Kotrelev, V. N.; Kostryukova, T. D.; Lyamkina, Z. V.;  
Pechenkin, A. A.; Smirnova, O. V.; Korovina, Ye. V. 45

ORG: none

TITLE: <sup>15</sup> Film materials based on polycarbonate <sup>15</sup> "ilon" <sup>15</sup>

SOURCE: Plasticheskiye massy, no. 9, 1966, 20-22

TOPIC TAGS: polycarbonate plastic, synthetic material, polymer, dielectric layer,  
polymer dielectric, dielectric material

ABSTRACT: Physicomechanical, structural, and dielectric properties of the polycarbonate "ilon" films prepared from 1,1-di-(4-oxyphenyl)-cyclohexane and phosgene were studied in the temperature range from 60 to 210°C. It was found that the tensile strength of the ilon films was a function of the molecular weight of the polycarbonate. The softening point of the ilon films was found to be approximately 160-170°C. It was also found that the structure of the ilon films is less regular than that of the "diflon"-films [diflon is a brand name of a commercial polycarbonate resin]. It was found that ilon films exhibit constant dielectric properties in the range from -60 to +170°C. It is concluded that the ilon films are superior to diflon films for application as dielectric films. Orig. art. has: 5 figures and 2 tables.

SUB CODE: 11/ SUBM DATE: 00/ ORIG REF: 003/ OTH REF: 002  
Card 1/1 nst

UDC: 678.673'41'5.06-416

ACC NR: AP7002973 (A) SOURCE CODE: UR/0413/66/000/024/0069/0069

INVENTOR: Kotrelev, V. N.; Ostroumov, B. D.; Opolovenkov, A. F.; Krasnov, V. A.

ORG: none

TITLE: Method of preparing a chemical composition from fluoroplast 40.  
Class 39, No. 189571

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 24,  
1966, 69

TOPIC TAGS: plastic, teflon, polytetrafluoroethylene, fluorocarbon ~~plastic~~ resin  
~~fluoroplast-40~~

ABSTRACT: An Author Certificate has been issued for a method of preparing a composition based on fluoroplast-40 (an unidentified fluorocarbon plastic). The technological properties of the composition are improved by adding up to 10% of polytetrafluoroethylene to the fluoroplast-40 during processing. [Translation]

[NT]

SUB CODE: 11/SUBM DATE: 18Dec64/

Card 1/1

UDC: 678.743.41-139



KOTRIKADZE, N.S.

Variation in the chemical composition of Tiflis mineral waters.  
Soob.AN Gruz.SSR 24 no.5:547-554 My '60. (MIRA 13:8)

1. Geologicheskiiy institut AN GruzSSR. Predstavleno akademikom A.I.  
Dzhanelidze.  
(Tiflis--Mineral waters)

KOTRIKOV, Kim Pavlovich, starshiy prepodavatel'

Determination of the frequency characteristics of an asynchronous  
motor with frequency regulation. Izv.vys.ucheb.zav.; elektromekh.  
5 no.3:277-284 '62. (MIRA 15:4)

1. Kafedra elektricheskikh mashin Odesskogo vysshego inzhenernogo  
morskogo uchilishcha.  
(Electric motors, Induction)

KOTRIKOV, Kim Pavlovich, starshiy prepodavatel'

Effect of the saturation of the magnetic circuit of an asynchronous machine on its characteristics with presence of frequency regulation.  
Izv. vys. ucheb. zav.; elektromekh. 5 no.12:1372-1378 '63  
(MIRA 16:6)

1. Kafedra elektricheskikh mashin vysshego inzhenernogo morskogo uchilishcha.

(Electric motors, Induction)

KOTRIKOV, K.P., inzh.

Effect of the magnitude of magnetic flux on the heating of a  
frequency regulated induction motor. Izv. vys. ucheb. zav.;  
energ. 6 no.9:30-36 S. '63. (MIRA 16:12)

1. Odesskoye vyssheye inzhenernoye morskoye uchilishche.  
Predstavlena sektsiyey elektromekhaniki i avtomatiki nauchnoy  
konferentsii.

KOTRIKOV, K.P., starshiy prepodavatel'

Frequency starting of asynchronous motors. Sid. sil. ust. no.2:153-  
162 '63. (MIRA 17:1)

1. Odesskoye vyssheye inzhenernoye morskoye uchilishche.

KOTRIKOV, Kim Pavlovich, starshiy prepodavatel'

Circle diagram of an asynchronous motor with varying frequency.

Izv. vys. ucheb. zav.; elektromekh. 7 no.2:166-173 '64.

(MIRA 17:4)

KOTR/LA-HAPALOVA

Change in the content of hops components at the time of ripening of the hops. Kotr/LA-Hapalova and M. Vancura (Vysokomý Ústav, Prague). *Formulario* 1954, 310-18. Objectives of the study are (1) to observe the formation of isomuls and  $\alpha$ -acid (I) and  $\beta$ -acid (II) (derivatives of humulone,  $C_{21}H_{30}O_6$  and lupulone,  $C_{21}H_{30}O_6$ , resp.) during the period of ripening, and to obtain near-max. values which is believed to coincide with the best qualities for the brewing industry; (2) to compare the evolution of these compounds in several hybrids. I is determined by colorimetry; II by volumetric titration, and lupulone (III) by colorimetry according to the method of J. Cherek. Data of acids not published before is given: Wash 10 g. milled hops in 100 cc.  $H_2O$  and add 0.5 g. activated C. Filter under suction through fritted glass. Rinse flask and wash filter with 100 cc.  $H_2O$ . Quantitatively the  $H_2O$  is decanted to a distal flask constructed at the end and is distd. by  $CO_2$ . The residue is dissolved in MeOH, poured quantitatively into a 100 cc. volumetric flask and add. to the mark with MeOH. After the fluid clarifies, I and II are detd. as above (titration of II in alk. NaOH). Five plants are sampled for each of five hybrids (czech Nos. 31, 72, 86, and 114 and an exptl. non-native hybrid, No. 126). Samples are taken at each stage of maturity from each plant

2

KOTRLA-HAPALOVA, M.

CZECHOSLOVAKIA / Chemical Technology. Chemical Products and  
Their Application. Fermentation Industry.

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, No 10235

Author : Kotrla-Hapalova, M.

Inst : Not given

Title : The Lowering of the Brewing Qualities of Hops Infested by  
Rot

Orig Pub : Kvasny prumysl, 1956, Vol 2, No 3, 52-55.

Abstract : The negative effect of rot (*Pharodon humuli*) on the quality of hops has been confirmed by organoleptic tests on beer produced from rot-infested hops.

Card : 1/1

KO ~~APPROVED FOR RELEASE~~: 08/23/2000

CIA-RDP86-00513R000825420005-5

Effect of some constituents, especially the colloids, of malt extract on course of hop-boiling. V. Salec, M. Kotrla-Hapalova and M. Vancura (Brno, 1954, 66, 2, 182-186). The proteolytic prep. Collupulin is chosen (in preference to four other preps.) for experiments on the effects of modification of the wort proteins. The best results (with average hop additions) as regards utilisation of the hop-bitters and the general quality of the resulting beer are obtained with the use of 1 g. of the prep. per l. (the smallest amount tried) of first wort, which gives a ratio of the Landin protein fractions A : B : C of 3 : 2 : 4-5 in the wort, and 1 : 1-2 : 4-7 in the beer. The proteolytic prep. appears also to have an amyolytic effect on the complex carbohydrates. Collupulin increases colloidal and biological stability, but excessive pptn. of the proteins of high and medium mol. wt. tends to spoil the taste of the beer. P. S. ASHF.

KOTRLA - HAPALOVA, M.

*ml* Influence of furanogenic constituents and proteins of hops on beer production. V. Sakal, M. Kotrla-Hapalová and M. Vancura (Prague, 1954, 84, 3, 361-363). The results of experimental brewings confirm the improvement of the quality of the resulting beer (in comparison with normally hopped beer) by the separate use in equivalent amounts of the isolated bitter + tannin hop-fraction. Undesirable effects on taste, retention in solution of bitter, colour and biological stability result from additions (together with the bitter + tannin) of aq. extracts of the hops obtained after removal of the bitter and tannin. These extracts contain the furanogenic and protein constituents (amounting to ~10%) of the hops; although ~20% of their total amount passes into solution during hop-boiling, their presence has an undesirable effect on the outcome. The final hop-residue (left after the extraction with water) has a less undesirable effect on beer quality. These results explain the (previously observed) undesirability of exhaustive extraction of hops, and the advantages of the proposed stepwise addition of hops during boiling (cf. J.S.F.A. Abstr., 1955, II, 181). P. S. Anup.

KOTRLA - HAPALOVA, MILANA

CZECHOSLOVAKIA: Ministry of Agriculture, Prague, 1957, 3, No 6, 122-125; 2nd and 3rd pp. of cover. Their Application, Part 3. - Fermentation Industry.

Abs Jour : Ref Zhur - Khimiya, No 7, 1958, 22991  
 Author : Milena Kotrla-Hapalova  
 Inst : -  
 Title : Experimental Cooking of Hops Treated with Phosphorous Insecticides.  
 Orig Pub : Kvasny prumysl, 1957, 3, No 6, 122-125; 2nd and 3rd pp. of cover.

Abstract : The safety of the use of organophosphorus insecticides (cistox, methacystox (I) and ekatox (II)) mixed with cupricol (III) was investigated with experimental cooking. It was established that the preparations produced a weakly stimulating action on the formation process of tanning substances of hops, and that I and II produced a weak inhibiting action on the formation of bitter substances.



KOTRLA - GAPALOVA

CZECHOSLOVAKIA/Chemical Technology - Fermentation Industry.

H.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 55474

Author : Salach, Kotrla-Gapalova, Vanchura

Inst : -

Title : The Effect of Chemical Composition of Water upon the Quality of Beer and Wort.

Orig Pub : Kvasny prumysl, 1958, 4, No 1, Priloha, 1-9.

Abstract : In studying the conditions needed for the rational utilization of hops in the process for preparing wort, an investigation was made on the effect of different water hardness, i.e., total, temporary and permanent hardness. It was found that the ratio of calcium and magnesium salts, particularly bicarbonates to sulfates and chlorides, depends on a change in pH. The optimum ratio of temporary to permanent hardness is 1:1. The value of a total hardness has a smaller magnitude. Magnesium bicarbonate has a greater undesirable effect upon the process

Card 1/2

CZECHOSLOVAKIA/Chemical Technology - Fermentation Industry.

APPROVED FOR RELEASE: 08/29/2000

CIA-RDP86-00513R000825420005-5

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 55474

for preparing wort (with hops added), and on the quality of beer than does calcium bicarbonate. An excess of the latter significantly reduces the unfavorable effect of magnesium bicarbonate. The need for more detailed information on permanent hardness is pointed out (in particular, the determination of calcium type salts). Water having a high temporary hardness causes the pH to increase and favors the formation of bitter substances in hops in the so-called molecular form, as a result of which beer acquires a sharp bitter taste.

Card 2/2

KOTRLA-HAPALOVA, M.

Objective determination of beer bitters. (To be contd.) p. 177.

KVASNY PRUMYSL. (Ministerstvo potravinarskeho prumyslu) Praha, Czechoslovakia.  
Vol. 5, no. 8, Aug. 1959.

Monthly List of East European Accessions (EEAI) LC Vol. 8, no. 11, Nov. 1959.  
Uncl.

KOCHLA-HARTIGL, M.

Objective determination of beer bitter. p. 21

KRATKY, J. (Ministerstvo potravinarskeho pruvodu)  
Praha, Czechoslovakia Vol. 5, no. 4, Sept. 1959.

Monthly List of East European accession, (LHAI), 14, Vol. 1, No. 12, Dec. 1959  
Uncl.

L 32997-66 T JK

ACC NR: AP6024088

SOURCE CODE: CZ/0082/66/000/001/0042/0047

AUTHOR: Kolar, O.; Behounkova, L.; Klobusicka, M.; Kotrle, M. 37

ORG: Neurological Clinic/headed by Professor, Doctor J. Hrbek, Doctor of sciences/, Medical Faculty, PU, Olomouc (Neurologická klinika lékařské fakulty PU); Microbiological Institute/headed by Docent, Doctor E. Marsalek/, Medical Faculty, PU, Olomouc (Mikrobiologický ústav lékařské fakulty PU); Department of Experimental Cytology, SAV/headed by Academician I. Stanek/, Bratislava (Oddelení experimentální cytologie SAV); Histological and Embryological Institute, Medical Faculty, PU/headed by Docent, Doctor M. Obrucnik, Candidate of sciences/, Olomouc (Histologický a embryologický ústav lékařské fakulty PU); [Kolar] Faculty Hospital, Olomouc (Fakultní nemocnice)

TITLE: Problem of immunological reactions connected with mononuclear cells in the cerebrospinal fluid in the course of subacute encephalitis Dawson-Pette-Doring-van Bogaert [This paper was presented at the 8th Pediatric Neurology Days held in Stary Smokovec in 1964 as well as at the Biological Days held in Prague in 1964.]

SOURCE: Československa neurologie, no. 1, 1966, 42-47

TOPIC TAGS: immunology, central nervous system, encephalitis, experiment animal, antigen, cell physiology, neurology

ABSTRACT: An attempt was made to transfer late hypersensitivity from 12 patients to guinea pigs. The antigen used was an extract from the brain tissue of a deceased patient who suffered from subacute Dawson-Pette-Doring-van Bogaert encephalitis. A positive reaction to cerebrospinal fluid of patients was found in 50% of the guinea-pigs. Late

Card 1/2

0015

16 53

L 32997-66

ACC NR: AP6024088

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hypersensitivity was transferred only in 1 of 22 cases. Experiments with tissue cultures from fetal brain indicated that in addition to mononuclear cells originating from blood elements and leptomeningeal structures, elements originating in brain or spinal cord tissue should be expected in the cerebrospinal pathways in subacute cases of the discussed encephalitis. Immunological function of fluid mononuclear cells in transferring late hypersensitivity by the cerebrospinal fluid are discussed. [Based on authors' Eng. abst.] [JPRS]

SUB CODE: 06 / SUBM DATE: 20Jul64 / ORIG REF: 008 / SOV REF: 002  
OTH REF: 010

Card 2/2 20

KOLAR, O.; BEHOUNKOVA, L.; KLOBUSICKA, M.; KOTRLE, M.

The problem of immunological reactions connected with mononuclear cells in the cerebrospinal fluid in the course of subacute encephalitis Dawson-Pette-Doring-van Bogaert. Cesk. neurol. 29 no.1:42-47 Ja '66.

MICHALEC, C., RNDr.; KOCNA, A., MUC.; KOTRLIK, J., MUC.

Lipid metabolism. I. Determination of total, free, and esterified cholesterol in blood serum in carcinomas and in liver diseases.  
Cas. lek. cesk. 91 no.26:767-771 27 June 52.

1. Ustr. laboratoré SFN, Praha; predn. prof. dr. J. Horejsi.  
(NEOPLASMS, blood in,  
cholesterol, determ.)  
(LIVER, diseases,  
liver cholesterol in, determ.)  
(CHOLESTEROL, in blood,  
in cancer & liver dis., determ.)  
(BLOOD,  
cholesterol, in cancer & liver dis., determ.)

DULICEK, K.; KOTRLIK, J.

Contribution to the importance of observing the level of serum transaminases during recovery from infectious hepatitis. Cas. lek. Cesk. 104 no.46:1279 19 N '65.

1. Infekcni klinika lekarske fakulty Karlovy University v Hradci Kralove (prednosta prof. dr. J. Ondracek).

APPROVED FOR RELEASE: 08/23/2000 <sup>Infectious Diseases</sup> CIA-RDP86-00513R000825420005-

CZECHOSLOVAKIA UDC 616.831.9-002.022.71.252-02:616.711-002.1

KOTRLIK, J.; PECHACEK, M.; Clinic of Infectious Diseases, Medical Faculty, Charles University (Infekcni Klinika Lekarske Fakulty KU), Hradec Kralove, Head (Prednosta) Prof Dr J. ONDRACEK.

"Staphylococcal Meningitis Caused by Osteomyelitis of the Spine."

Prague, Casopis Lekaru Ceskych, Vol 105, No 27-28, 4 Jul 66, pp 720 - 722

Abstract [Authors' English summary modified]: A case of purulent staphylococcal meningitis in a young man is described. The condition resulted from osteomyelitis of vertebrae L2 and L3 with an atypical course. The patient died. Attention is drawn to the necessity of early diagnosis and therapy of meningeal affections. 11 Western, 3 Czech, 1 Polish reference. (Manuscript received Apr 65).

KOTRLIK, J

- 4245
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ONDRACEK, Jaroslav; KOTRLIK, Jiri

Leukocytic reaction to an antigenic stimulus in different age groups. Sborn. ved. prac. lek. fak. Karlov. Univ. 9 no.1: 363-368 '64.

1. Infekční klinika (prednosta: prof. MUDr. J. Ondracek)  
Karlovy University v Hradci Kralove.

HERCUT, Vladimir; VONDRACKOVA, Anna; SANDA, Zdenek; KOTLIK, Jiri;  
PECHACEK, Miroslav.

Fatal herpetic encephalitis. Anatomical and virological findings.  
Sborn. ved. prac. lek. fak. Karlov. Univ. 8 no.4:433-442 '65.

1. Patologicko-anatomicky ustav (prednosta: prof. MUDr.  
A. Fingerland, DrSc.); Ustav lekarske mikrobiologie (pre-  
nosta: MUDr. O. Vejbona); Interni oddeleni nemocnice v Jicine  
(prednosta: doc. MUDr. Z. Sanda, CSc.) a Infekcni klinika  
(prednosta: prof. MUDr. J. Ondracek) Karlovy University v  
Hradci Kralove.

KOTRLIK, Jiri; PECHACEK, Miroslav

Contribution to the problem of tyssa prevention. Sborn. ved. prac.  
lek. fak. Karlov. Univ. 8 no.5:591-594 '65.

1. Infekční klinika (prednosta - prof. MUDr. J. Ondracek) Kraj-  
ského ústavu národního zdraví v Hradci Králové.

KOTRLY, Alois; TARCZYNSKI, Stefan

Filariinae Stiles, 1907 in the subcutaneous tissue of deer *Cervus elaphus* L. in Poland and Czechoslovakia and its taxonomical position. *Wiadomosci parazyt.*, Warsz. 4 no.5-6:721; Engl. transl. 722 1958.

1. Vyzkumny Ustav Lesa a Myslivosti Csl. AZV Zbraslav i z Zakladu Parazytologii i Chor. Inw. SGGW w Warszawie.

(FILARIASIS,

Filariinae infect. of deer (Pol))

(ANIMALS, dis.

deer, Filariinae infect (Pol))

KOTRLY, Alois, inv.

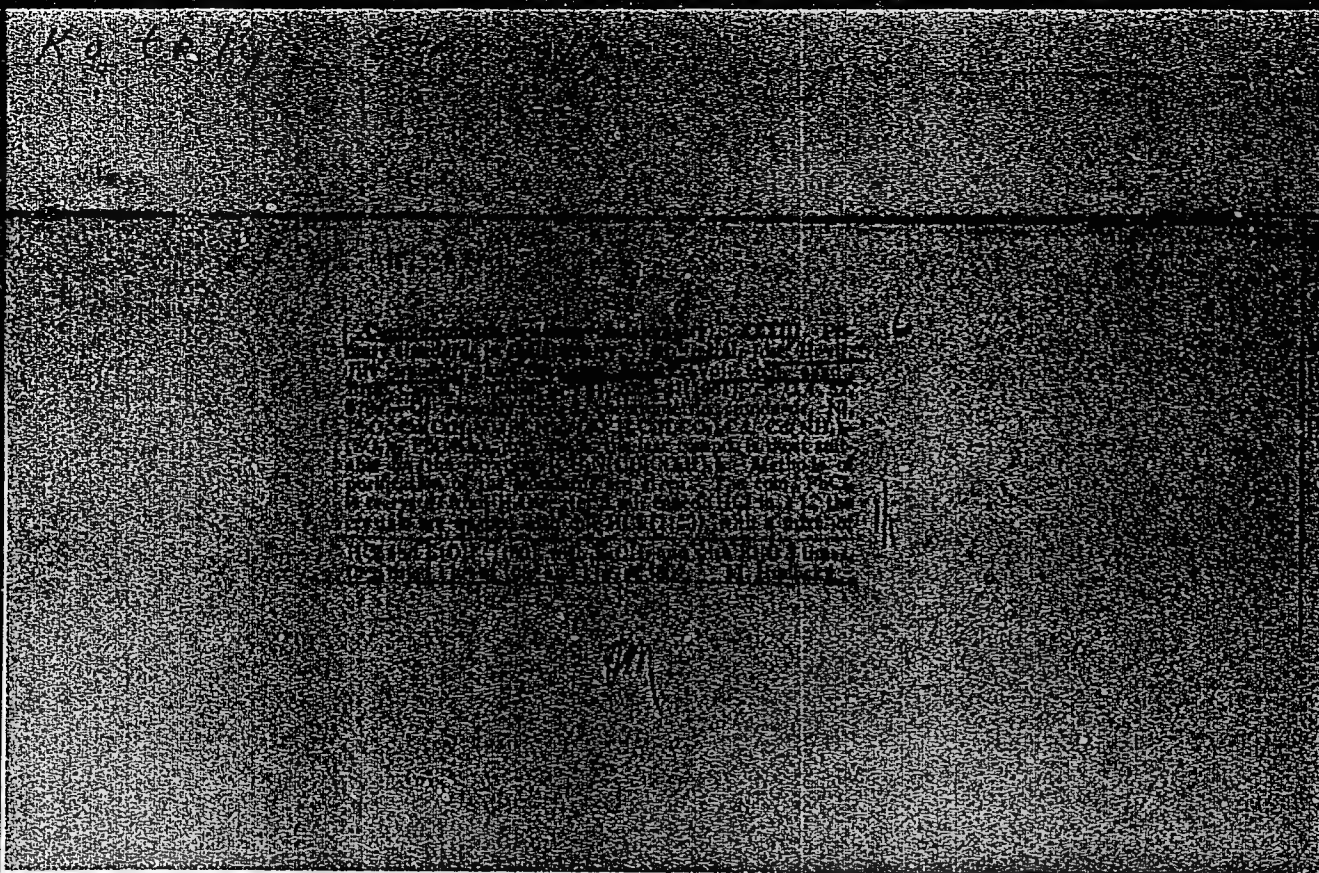
Parasites of chamois in Jeseniky Mountains. Lesnictvi 8 no.11:941-956 N '62.

1. Vyzkumny ustav lesniho hospodarstvi a myslivosti, Zbraslav nad Vltavou.

PAV, Jaromir, MVDr.; KOTRLY, Alois, inz.; ZAJICEK, Dalibor, MVDr.

Contribution to the helminthofauna in wild boars (*Sus scrofa* L.) in reservations and free forests. Les cas 9 no.3:251-260  
Mr '63.

1. Vyzkumny ustav lesniho hospodarstvi a myslivosti, Zbraslav;  
Statni veterinarni ustav, Praha.



Kotrly, S.

Soviet work in chelatometry. P. 88  
SOVETSKA VEDA: CHEMIE. (Ceskoslovenska akademie ved. Chemicka sekce)  
Praha.  
Vol. 6, no. 1, 1956

Source: EEAL - LC Vol. 5. No. 10 Oct. 1956



Katyle S

Katyle S. Katyle  
1916-1917 When determining small amounts of  
 cyanide, an accurate equivalence point can be  
 obtained by using potentiometric titration, which can  
 be used for analyzing colored and turbid  
 acids. Procedure: Add 50 ml (4%) (5 ml) and  
 6 N and NH<sub>4</sub> (5 ml) to the sample, dilute to 50 ml  
 and titrate with AgNO<sub>3</sub> solution. Measure two values  
 before and three after the equivalence point has  
 been reached with a glass electrode. Determine the  
 end-point by using a graphical evaluation. The  
 average error is 2.5%. Chlorides and phosphates  
 do not interfere.

RM  
 yz

Kelley

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CP

10/11/19

KOTRLY S.

CZECHOSLOVAKIA / Analytical Chemistry. Analysis of Inorganic Substances. E-2

Abs Jour: Ref Zhur-Khimiya, 1958, No 17, 57142.

Author : Vresial J., Havir J., Brandstetr J., Kotrly S.,  
Inst : Not given.  
Title : Separation of Phosphates and Fluorides by Precipitation of their Silver Salts.

Orig Pub: Chem. listy, 1957, No 9, 1762-1764.

Abstract: Conditions of quantitative separation of large quantities of  $PO_4^{3-}$  from  $F^-$  by means of precipitation of the former as  $Ag_3PO_4$  have been investigated. For the purpose of reducing solubility of  $Ag_3PO_4$ , and in order to improve its precipitation, it is necessary to employ sufficiently large excess of  $Ag^+$  and an optimum pH of the solution of 4.5.

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8

CZECHOSLOVAKIA / Analytical Chemistry. Analysis of Inorganic Substances. E-2

Abs Jour: Ref Zhur-Khimiya, 1958, No 17, 57142.

Abstract: The alkalization of solution after the precipitation of  $Ag_3PO_4$ , proposed by Fennell (Ref Zhur-Khimiya, 1956, 43545) does not produce the desired effect. During the performance of this analysis, the solution is neutralized to phenolphthalein, then is treated with 1 n solution of  $AgNO_3$ , and after all of the  $Ag_3PO_4$  has been precipitated out, 1-2 cc  $AgNO_3$  is added. The acid, formed during the precipitation step, is neutralized with 0.3 n NaOH solution up to the point when a brown precipitate appears, followed by the dilution with water up to

Card 2/5

KOTRLY STANISLAV

CZECHOSLOVAKIA / Analytical Chemistry - Analysis of  
Inorganic Substances.

F.

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 24773

Author : Kotrly Stanislav

Inst :

Title : Complexometric Titration (Chelatometry). XXVIII. Microde-  
termination of Lead Using Dithizone as Indicator.

Orig Pub : Chem. listy, 1957, 51, No 4, 730-734; Sb. chekhosl. khim.  
rabot, 1957, 22, No 6, 1765-1770

Abstract : For a complexometric titration of  $Pb^{2+}$  use is made of 0.01-  
0.0001 M solutions of ethylenediamine tetracetic acid (I)  
neutralized with ammonia. More dilute solutions of I con-  
tain about 50%  $C_2H_5OH$  to ensure a constant content of  
 $C_2H_5OH$  in the solution being titrated. As an indicator is  
used dithizone (II) in the form of a saturated aqueous so-  
lution. Titration is effected in an aqueous alcohol  
(40-60%  $C_2H_5OH$ ) or aqueous acetone (50% acetone) media,

Card 1/3

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lution of urotropine (III) (140 g of purest III and 560  
ml 1 N  $HNO_3$  in 1 liter). Concentration of  $Pb^{2+}$  in the so-  
lution being titrated must be 0.05-6 mg in 10 ml. Deter-  
mination of  $Pb^{2+}$  is interfered with by  $NH_4^+$ , the ca-  
thions of alkali and alkaline-earth metals, as well as  
 $Mg^{2+}$ ,  $Cd^{2+}$ ,  $Zn^{2+}$ ,  $Ag^+$ ,  $Hg^{2+}$ ,  $Co^{2+}$ ,  $Ni^{2+}$ ,  $Bi^{3+}$  and other ca-  
thions interfere. In the presence of the interfering ca-  
thions  $Pb^{2+}$  is extracted with a solution of II (0.4 g II  
in 1 liter  $CHCl_3$ ) at pH 9.5. The majority of the interfe-  
ring cathions are masked in the course thereof by means of  
ammonium citrate, KCN and  $NH_2OH.HCl$ . Separation of Pb  
from Bi, Sn(2+) and Tl(1+) is very difficult. The complex

Card 2/3

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CZECHOSLOVAKIA / Analytical Chemistry - Analysis of  
Inorganic Substances.

E-2

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 24773

of  $Pb^{2+}$  with II is decomposed by shaking with dilute  $HNO_3$   
(1:100) and an aliquot portion of the resulting solution  
(20 ml) is prepared for titration by addition of  $C_2H_5OH$   
and 5 ml of a solution of III (140 g III and 120 ml 1 N  
 $HNO_3$  in 1 liter). Determinable minimum of Pb is 40  $\gamma$ .  
Communication XXVII see RzhKhim, 1958, 24705.

KOTRLY, S.; HAVIR, J.

"Automatic reservoir for water purified by ion exchange resins."

p. 557 (Chemické Listy, Vol. 52, no. 3, Mar. 1958, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 9,  
September 1958

APPROVED FOR RELEASE: 08/23/2000 J., CIA-RDP86-00513R000825420005-

COUNTRY : Czechoslovakia E-1  
CATEGORY :  
ABST. JOUR. : RZhKhim., No. 22 1959, No. 78260

FILE : Not given  
: Complexometric Titrations (Chelatometry). XXXIII.  
Principal Substances Used in Complexometry.  
XXXIV. Chromazurol S as an Indicator for the  
ORIG. PUB. : Collection Czechoslov Chem Commun, 22, 360-369,  
632-634: no 3, 700-707 (1959)  
ABSTRACT : See RZhKhim, 1958, No 17, 57115, 57137: No 12,  
75701. For Communication XXXII see RZhKhim, 1958,  
No 24, 81349.

\* Kotrly, S.; Malat, M. and Tenbrova, M.; and  
Houda, M., Koerbl, J., Bazant, v., and Fribil, R.

\*\* Determination of Thorium, Nickel, Cerium, and  
Lanthanum. XXXV. The Indirect Determination of  
Aluminum with Xylenol Orange

END: 7/

KOTRLY, S.; VRESTAL, J.

Complexometric titrations (chelatology). XLVII. Microdetermination of bismuth and lead by gradual titration with xylenol orange as indicator; study of changes in the color of the indicator by the photometric titration method. Coll Cz Chem 25 no.4:1048-1164 Ap '60.  
(EEAI 9:12)

1. Technische Hochschule fur Chemie, Pardubice und Militatistische Akademie "A.Zapotocky", Brno.

(Chelatometry) (Bismuth) (Lead) (Xylenol orange)  
(Indicators and test papers) (Photometry)

VRZHESHTYAL, Ya., KOTRLY, S.

Adapter with a photomultiplier for the UM-2 monochromator. Zav.lab. 27  
no.1:116-117 '61. (MIRA 14:3)

(Monochromators)

KOTRLY, Stanislav

Theory of photometric microtitrations. Pt.1. Sbor VŠChT  
Pardubice Pt.2:49-62 '63.

1. Department of Chemistry, College of Science, Baghdad,  
Iraq. Present address: Chair of Analytic Chemistry, Higher  
School of Chemical Technology, Pardubice.



L 30914-66 EWT(m)/ETC(f)/T

ACC NR: AP6022913

SOURCE CODE: CZ/0038/66/000/001/0020/0020

AUTHOR: Kotrnoch, Josef; Stepanek, Karel

39  
B

ORG: Nuclear Power Station, Skoda Plant, Plzen (Zavod Jaderne elektrarny, Skoda)

TITLE: Investigation of gas mixing in a bundle of fuel rods

19

SOURCE: Jaderna energie, no. 1, 1966, 20

TOPIC TAGS: gas flow, nuclear reactor component

ABSTRACT: The article is an abstract of the authors' report No Ae 696/Dok. Mixing of gases flowing parallel to a bundle of rods 15 mm dia was investigated. The experiments were made at a pressure of 7 kg/m<sup>2</sup> and at 70°C. The method used is based on the application of Freon 12. Curves of constant concentration of freon are shown in the original report. [JPRS]

SUB CODE: 18 / SUBM DATE: none

Card 1/1 CC

UDC: 621.039.5 A1 621.039.534.34  
0915 0989

DOSEN, Doka; KOTROSAN, Radica

Fate of patients with active tuberculosis detected in 1957 during mass radiography in Zrenjanin. Tuberkuloza no.1:79-87 '62.

1. Bolnica za lecenje tuberkuloze pluca, Zrenjanin, (v.d. upravnik: dr M. Momirov) Zdravstveni dom zeleznicara, Zrenjanin, (upravnik: dr M. Glumac).

(TUBERCULOSIS PULMONARY)

KOTROVSKIY, H.M.; TKACHENKO, A.N.

Mechanized pneumatic feeding of samples for rapid analysis.  
Zav.lab. 23 no.6:756-757 '62. (KIRA 15:5)

1. Nachal'nik TSentral'noy laboratorii avtomatiki Makeyovskogo metallurgicheskogo zavoda imeni Kirova (for Kotrovskiy).
2. Nachal'nik TSentral'noy khimicheskoy laboratorii Makeyevskogo metallurgicheskogo zavoda imeni S.M. Kirova (for Tkachenko).  
(Makeevka - Metallurgical analysis)  
(Pneumatic tube transportation)

KOTROVSKIY, M. M.

Kotrovskiy, M. M., Kuchminskiy, M. F. and Kostogryzov, V. S.

"Heating ovens of rolling shops with acicular-type recuperators," Trudy Stalinskogo obl. otd-niya VNITOM, no 1, 1949, p. 110-16

SO: U-5241, 17 December 1953, (Letopis 'Zhurnal 'nykh Statey, No. 23, 1949)

PHASE I Treasure Island Bibliographic Report

BOOK

Call No.: TN667.K6

00000111

Authors: KOTROVSKII, M.M. and KOSTOGRYZOV, V.S.

Full Title: AUTOMATIC CONTROL OF THERMAL PROCESSES IN THE METALLURGICAL INDUSTRY

Transliterated Title: Avtomaticheskoe regulirovanie teplovykh protsessov metallurgicheskogo proizvodstva.

Publishing Data

Originating Agency: None.

Publishing House: State Publishing House of Scientific-Technical Literature on Ferrous and Nonferrous Metallurgy.

Date: 1952.

No. pp.: 410

No. copies: 5,500

Editorial Staff

Editor: Lvov, M.A.

Technical Editor: None.

Editor-in-Chief: None.

Appraiser: None.

Text Data

Coverage: The work describes automatic control apparatuses used in metallurgical processes. The basic principles of the control of temperatures, gas pressures, flow of air and liquids, and fuel-air ratio are explained. The control of major parameters is related mainly to various metallurgical processes. However, these principles, in general, are applicable not only to metallurgical processes but technological processes as well. Diagram.

Purpose: A textbook for designers and technical personnel of metallurgical shops equipped with automatically controlled installations.

Facilities: None.

No. Russian References: 37.

Available: Library of Congress.

Asm

F

189-F. Practical Exploitation of Re-  
cuperative Rolling-Mill Furnaces. (In  
Russian.) P. V. Kobiakov and M. M.  
Kotkovskii. Za Ekonomiku Topliva,  
v. 9, Mar. 1952, p. 8-12.  
Construction and fuel economy of  
this type of furnace. Charts and  
diagrams. (F21)

Sov/133/58-9-26/29

AUTHORS: Dement'yev, V. M. and Kotrovskiy, M. M. (Engineers)

TITLE: A Study of the Process of Cooling of Ingots (Izucheniye protsessa okhlazhdeniya slitkov)

PERIODICAL: Stal', 1958, Nr 9, pp 847-851 (USSR)

ABSTRACT: Temperatures of the surface of ingots before placing them into soaking pits was regularly measured. This was found impracticable and a study of the cooling of ingots in ingot moulds, after stripping and during transport to the soaking pits was carried out. The temperature of the surface of ingots above 800°C was measured with an optical pyrometer and below 800°C with a thermocouple. On the basis of the results obtained cooling curves were constructed. From the cooling curves, tables and nomograms were made from

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Sov/133/58-9-26/29

A Study of the Process of Cooling of Ingots

which the surface temperatures of ingots can be determined from the time passed between teeming and arrival of ingots to the soaking pits with sufficient accuracy. There are 5 figures and 1 table.

ASSOCIATION: Makeyevskiy metallurgicheskiy zavod (Makeyevka Metallurgical Works)

Card 2/2

BORNATSKIY, Ivan Ivanovich; KOTROVSKIY, Mikhail Mikhaylovich; YARGIN,  
Aleksandr Pavlovich; LEBZEV, A.I., red.; YABLONSKAYA, L.V.,  
red.izd-va; MIKHAYLOVA, V.V., tekhn.red.

[First assistant steelmaker in open-hearth furnace plants]  
Pervyi podruchnyi stalevara na martenovskikh pechakh. Moskva,  
Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii,  
1959. 365 p. (MIRA 12:12)  
(Open-hearth process)



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77604

SOV/133-60-2-4/25

AUTHOR: Kotrovskiy, M. M., Paramonov, V. G. (Engineers)

TITLE: Effect of Port Size on Productivity of Open-hearth Furnaces Output

PERIODICAL: Stal', 1960, Nr 2, pp 111-117 (USSR)

ABSTRACT: The investigation of performance of the 370-ton open-hearth furnace ports of various designs, when feeding oxygen into the flame (with air enrichment up to 24%) was carried out on two groups of furnaces "A" and "B". Group "A": charge 370 ton, volume of gas checkers 116 m<sup>3</sup>, volume of air checkers 165 m<sup>3</sup>. Group "B": Charge 370 ton, volume of gas checkers 163 m<sup>3</sup>, volume of air checkers 224 m<sup>3</sup>, the height of smoke-stack 100m. To determine the most rational dimensions of the port the following points were investigated: (1) The area of gas outlet into the flue; (2) height of gas port over threshold of the door; (3) angle

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Effect of Port Size on Productivity of Open-hearth Furnaces Output

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of inclination of the roof (in the air duct); (4) angle of inclination of the gas port bottom in the flue; (5) the angle of incidence of air flow and gas flow; (6) angle of inclination of flue roof along the generatrix; (7) distance to the point of contact of gas flow with the bath; (8) height of air gap between the roof of ports and the flue; (9) length of "fore-chamber"; (10) ratio of cross sectional areas of flame and gas door; (11) ratio of flame door height to its average width; (12) height of "air dam" over charge door's bridge. As a result of investigation the most rational dimensions are given in Table 1. The established correlations are only effective under analogous working conditions. At present the ports of 370-ton furnaces are designed with consideration for the established optimum parameters for both groups "A" and "B". The design of ports is shown in Fig. 6. Research continues to determine the effects of individual parameters of ports on the productivity of open-hearth furnaces.

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Effect of Port Size on Productivity of  
Open-hearth Furnaces Output

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Table 1. The effect of main rational parameters of "Venturi-type" ports on productivity of 370-ton open-hearth furnaces, and a comparison of these parameters with typical parameters (Giprostal') and with those used by the plant.

(1) Area of gas door,  $m^2$  (2) ratio of gas door height to its width (3) height of gas hearth bottom over the bridge (hb) (4) angle of inclination of rhombic roof of port ( $\varphi$ ) (5) angle of inclination of gas hearth bottom and flue ( $\gamma$ ) (6) angle of inclination of flue roof along generatrix ( $\alpha$ ) (7) angle of incidence of air flow and gas flow ( $\psi$ ) (8) height of air gap between the roof of ports and the flue, mm (9) length of "forechamber", mm (LF) (10) flame

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Effect of Port Size on Productivity of  
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door (a) area, m (b) height, mm (H) (c) upper width,  
mm (K) (d) lower width, mm (U) (11) ratio of flame  
door height to its average width (12) ratio of areas  
of flame and gas doors (13) height of "air dam" over  
charge door bridge, mm (14) distance from the point  
of gas flow contact with the bath to flue, m. There  
are 1 table; and 6 figures.

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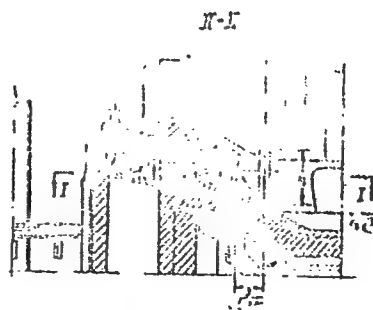
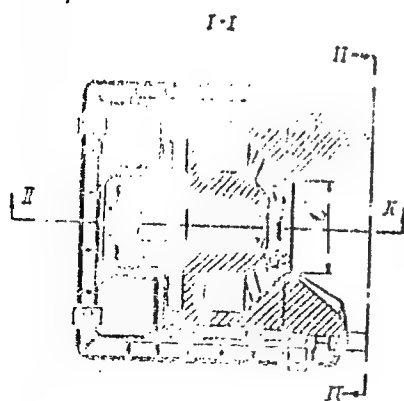
APPROVED FOR RELEASE: 08/23/2000

Effect of Port Size on Productivity of  
Open-hearth Furnaces Output

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SOV/133-60-2-4/25



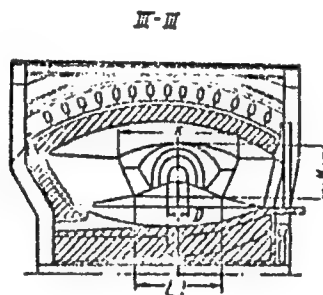
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Fig. 6

Effect of Port Size on Productivity of  
Open-hearth Furnaces Output

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Fig. 6. Design of 570-ton open-hearth furnace port  
with rational parameters. (D) width of gas door. For  
other designations see Table 1.



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DEMENT'YEV, V.M.; KOTROVSKIY, M.M.; NEKHLEBAYEV, Yu.P.

Roasting limestone in a fluidized bed. Metallurg 5 no.6:  
12-14 Je '60. (MIRA 13:8)

1. Makeyevskiy metallurgicheskiy zavod.  
(Ore dressing) (Fluidization)

KOTROVSKIY, M.M., inzh.; GELLER, G.Ya., inzh.

Automation of temperature conditions in open-hearth furnaces.  
Stal' 22 no.9:855-868 S '62. (MIRA 15:11)

1. Makeyevskiy metallurgicheskiy zavod.  
(Open-hearth furnaces) (Automation)

KOTROVSKIY, M.M., inzh.; GELLER, G.Ya., inzh.

Automatic centralized control of heat conditions in blooming  
mill regenerative soaking pits. Stal' 22 no.12:1131-1134 D '62.  
(MIRA 15:12)

1. Makeyevskiy metallurgicheskiy zavod.  
(Furnaces, Heating) (Automatic control)

KOTROVSKIY, M.M.; URUMBEGLIK, N.N.; CHERNIKOV, V.A.

Automation of the sintering process. Metallurg 8 no.6:8-10  
Je '63. (MIRA 16:7)

1. Makeyevskiy metallurgicheskiy zavod.  
(Sintering) (Automation)



KOTROVSKIY, M.M.; SHELYAR, M.S.; SUKHACHEVA, N.V.

Losses of blast furnace blast. Stal' 22 no.6:500 Je '62.  
(MIRA 16:7)

1. Maksyevskiy metallurgicheskiy zavod.  
(Blast furnaces)

KOTROVSKIY, M.; SVETLICHNYY, I.

Automation of the gas mixing station of the 850 mill. Metallurg  
9 no.11:31 N '64. (MIRA 18:2)

1. Makeyevskiy metallurgicheskiy zavod.

KOTROVSKIY, M.M.; KOPELEV, D.D.; BRAZHNIKOV, M.A.

Automation of the exhaust section of a sintering plant. Met. 1  
gornorud. prom. no.2:72-73 Mr-Ap '65. (MIRA 18:5)

Investigation of the efficiency coefficients in the solid solution system AlSb-GaSb. I. I. Burdiyan. (10 minutes).

[Investigation of some properties of indium arseno-telluride doped with bismuth. D. V. Gitzu, S. I. Radautsan. (Not Presented)].

Physico-chemical properties of the pseudo-binary alloys of arsenic with indium telluride. B. P. Kotrubenko, V. I. Lange, T. I. Lange.

Study of the anisotropy of microhardness of some semiconducting compounds. D. V. Gitzu, V. I. Lange, T. I. Lange. (Presented by D. V. Gitzu--15 minutes).

Report presented at the 3rd National Conference on Semiconductor Compounds, Kishinev, 16-21 Sept 1963

ACCESSION NR: AP4041366

S/0048/64/028/006/1007/1009

AUTHOR: Kotrubenko, B. P.; Lange, V. N.; Lange, T. I.

TITLE: Physicochemical properties of alloys of the indium arsenide-tellurium section

TOPIC TAGS: indium arsenic tellurium system, indium arsenide tellurium alloy, alloy physicochemical property, alloy electrical property, alloy structure

ABSTRACT: Polycrystalline specimens of indium arsenide containing 0.00, 0.10, 0.20, 0.50, 1.00, 2.00, 5.00, 10.0, 15.0, and 20 at% Te have been prepared by direct fusion of the initial components. Their structure was investigated, and the thermal expansion coefficient, density, microhardness, electric conductivity and Hall coefficient were determined. X-ray diffraction patterns showed that a diamond-type structure exists in alloys with up to 20 at% Te. The microhardness of all the alloys is about the same,  $350 \pm 10 \text{ kg/mm}^2$ , which fact indicates that no substantial changes occur in the atom location

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ACCESSION NR: AP4041366

or in the nature of the bonds between them. The electric conductivity and the charge carrier concentration increase sharply with an increase in Te content up to about 1.0% and then decrease somewhat. Changes in the thermal expansion coefficient and density correlate well with the changes in the electron concentration; the former have their minima at about the same tellurium content at which the charge carrier concentration in the alloy is the highest. From the results of the study it appears that, in spite of a sharp difference in the structure of the initial components, the indium arsenide-tellurium section with up to about 10 at% tellurium has a region of solid solutions with a diamond-type lattice adjoining indium arsenide. Orig. art. has: 2 figures.

ASSOCIATION: Laboratoriya poluprovodnikov\*kh soyedineniy Akademii nauk MoldSSR (Laboratory of semiconducting compounds, Academy of Sciences, MoldSSR)

SUBMITTED: 00

ATD PRESS: 3052

ENCL: 00

SUB CODE: MM

NO REF SOV: 005

OTHER: 002

Card 2/2

KOTS, A. F.

Kots, A. F. "The Russian 'Krechets' in the light of Darwinism", Okhrana prirody, 1948 (on the cover: 1949), No. 6, p. 66-79.

SO: U-3261, 10 April 53, (Letopis 'Zhurnal 'nykh Statey, No. 11, 1949).

KOTS, Anatoliy Yakovlevich; ASHKENAZI, G.I., redaktor; FRIDKIN, A.M.,  
tekhnicheskii redaktor.

[Electric lighting of power plants] Iskusstvennoe osveshchenie  
elektricheskikh stantsii. Moskva, Gos. energ. izd-vo, 1954.  
183 p. (MLRA 7:12)  
(Electric power plants) (Electric lighting)

KOTS, A.Ya., inzhener.

"Electric lighting". M.M.Epaneshnikov, M.V.Sokolov. Reviewed by  
A.IA.Kots. Svetotekhnika 2 no.2:32 '56. (MLBA 9:7)  
(Electric lighting)(Epaneshnikov, Mikhail Mikhailovich)  
(Sokolov, Mikhail Vasil'evich, 1897-)



KOTS, A.Ya., inzhener.

~~only for the eyes of the~~

Lighting system for 35-220kv outdoor distribution substations.  
Svetotekhnika 2 no.4:27-28 JI '56. (MIRA 9:10)

1.Teploelektroproyekt.  
(Electric lighting) (Electric substations)

KOTS, A.Ya., inzhener.

Lighting standards. Svetotekhnika 2 no.5:24-25 S '56.

(MLRA 9:11)

1. Teploelektroproyekt.

(Electric lighting--Standards)

KOTS, A.Ya., inzhener.

Possible use of reflector luminaries produced by the "Gostasvet"  
factory for industrial illumination. Svetotekhnika 3 no.3:27-28  
Mr '57. (MLRA 10:3)

1. Teploelektroproyekt.  
(Lighting) (Reflectors)

KOTS, A.Ya., inzhener.

Illuminating the area of the main control board. Svetotekhnika 3  
no.5:6-9 My '57. (MLRA 10:5)

1. Trest po proyektirovaniyu izyskaniyam teplo- i elektrostantsiy,  
setey i podstantsiy.  
(Lighting) (Electric power plants)

KOZL, A.Ya., inzhener.

Illuminating the machine room of electric power plants. Svetotekhnika  
no. 13-17 S '57. (MLHA 10:9)

1. Teploelektroproyekt.

(Electric power plants--Lighting)

AUTHOR: Kots, A.Ya., Engineer. 104-4-14/40

TITLE: The main questions of lighting arrangements for power stations of super-high output. (Osnovnye voprosy ustroystva osveshcheniya sverkhmoshchnykh elektrostantsii)

PERIODICAL: "Elektricheskie Stantsii" (Power Stations), 1957, Vol. 28, No.4, pp. 51 - 54 (U.S.S.R.)

ABSTRACT: The problem of lighting a large power station is considered in the light of an analysis of operating experience at 30 stations. Until 1950, the supply to power station lighting systems was usually from 2 special lighting transformers of which one was a spare. In 1950, it was decided to provide lighting supply from the house service transformers which reduces the cost of the lighting installation. However, the voltage on the house service busbars varies inconveniently for lighting purposes and it is here recommended to have a special lighting transformer using a power transformer as a reserve. The decision of 1950 should be revised. Emergency lighting of power stations is usually provided from accumulators and it is necessary to restrict the emergency lighting load so that the accumulator installation is not too big. Emergency lighting should be provided only in the main buildings, on the main control board, in the boiler house, the

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The main questions of lighting arrangements for power stations of super-high output. (Cont.)

104-4-14/40  
machine room and so on and the emergency lighting should be provided mostly in the form of local lighting at the most important working places. Some accidents still result from operating the emergency lighting from the accumulators for too long a period. Portable inspection lamps operating from 12 - 36 volts are often supplied from 220 V plug sockets by means of portable stepdown transformers and it is recommended to install a 12 V power system with plug sockets throughout the main building (where portable lamps are most used) instead of only in certain parts of the boiler house. Sub-stations of 35 - 220 kV are lit either by floodlights or by lighting fittings and there is no general agreement as to which is best. However, floodlights have a number of economic advantages, use less cable and are more convenient in operation, and should generally be used for sub-stations up to 220 kV. However, 400 kV sub-stations are so extensive that it is difficult to light them by floodlights and a combination of floodlights and fittings is recommended. In those parts of the power station where high levels of illumination are required the use of fluorescent lamps is recommended because of their high luminous efficiency and long life, although the installation costs are, of course,

2/3

KOTS, A.Ya., inzh.

Electric lighting of thermal electric power stations in the  
U.S.A. Elek. sta. no.4 Supplement:47 J1-Ag '58. (MIRA 11:10)  
(United States--Electric power plants--Lighting)

KOTS, A.Ya., inzh.

Lighting boiler units in electric power plants. Svetotekhnika  
4 no.4:20-21 Ap '58. (MIRA 11:4)

1. Tepoelektrproyekt.  
(Electric lighting)



KOTS, A.Ya., inzh.

Lighting of electric power plants in the Federal Republic of  
Germany. Svetotekhnika 4 no. 8:30-31 Ag '58. (MIRA 11:7)  
(Germany, West--Electric power plants--Lighting)

KOTS, A.Ya., inzh.

Installing lighting wiring in hot rooms. Svetotekhnika 4 no.9:25  
S '58. (MIRA 11:8)

1. Vsesoyuznyy gosudarstvennyy institut po proyektirovaniyu teplo-  
vykh elektrostantsiy.

(Electric lighting—Wiring)

*Rots, A.Ya.*  
AUTHOR: Kots, A.Ya., Engineer

94-3-1/26

TITLE: Make More Extensive Use of Luminescent Lighting (Shire  
vnedryat' lyuminestsentnoye osveshcheniye)

PERIODICAL: Proymshennaya Energetika, 1958, vol.13, No.3,  
pp.1-3 (USSR).

ABSTRACT: Luminescent (fluorescent) lamps are not widely used in the USSR for industrial lighting, partly because of the peculiarities of the existing lighting standards, the low unit output of luminescent lamps, the complex circuits, and the inefficiency and high cost of the fittings, which are largely hand-made. The existing standards require that when luminescent lamps are used, the illumination level shall be 2.5 to 3 times that required of incandescent lamps, so that the power output stays about the same. However, the committee concerned with matters of construction has approved new lighting standards, effective on January 1, 1959, in which the difference between the illumination levels for luminescent and incandescent lamps is much reduced. The article gives comparative costs of different kinds of lighting. The cost per installed kW is worked out and then the cost of a given level of illumination. The first cost of luminescent lamps exceeds that of incandescent lamps, but the running costs are lower. It is concluded that

Card1/2

KOTS, Anatoliy Yakovlevich; ASHKENAZI, G.I., red.; ASANOV, P.M., tekhn.red.

[Lighting of power plants and substations] Osveshchenie elektricheskikh stantsii i podstantsii. Moskva, Gos.energ.izd-vo, 1959.  
255 p. (MIRA 12:12)

(Electric power plants) (Electric substations)  
(Lighting)